



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,907	06/19/2001	Cornelis Roeland Bayense	VER-148XX	5302

207 7590 03/26/2003

WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP
TEN POST OFFICE SQUARE
BOSTON, MA 02109

EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 03/26/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,907

Applicant(s)

BAYENSE ET AL.

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 1-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: there appears to be no Brief Description of the Figure.

Appropriate correction is required.

Claim Objections

2. Claims 1-9 are objected to because of the following informalities: The claims begin with "Star", "Extrudates", "Catalyst", and "Use". Examiner suggests insertion of --A--, --An--, or --The--, where appropriate. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6, lines 1-2, "the attrition in accordance with ASTM D4058-87" lacks antecedent basis.

Art Unit: 1754

Claim 9 provides for the use of an extrudate, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claim 9 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

Art Unit: 1754

art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulaskey et al. US 3,673,079 in view of Neel et al. US 4,554,268.

Regarding claim 1, Mulaskey '079 discloses alumina extrudate rods (see column 4, lines 65-75), having a star shape (see column 5, lines 26-32), a side crushing strength of at least 30 pounds (see column 5, line 46 and column 14, line 68), pores above 1000 Angstroms (see column 5, lines 57-59) and a pore volume of 0.25-0.4 cc/g (see column 5, lines 53-54).

Clough '081 fails to disclose a bulk crushing strength of at least 1 MPa.

Neel '268 discloses a bulk crushing strength of 1-4 MPa.

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the 1-4 MPa bulk crushing strength of Neel in the alumina extrudate catalyst support of Mulaskey because Neel discloses his bulk crushing strength for use in an alumina catalyst support (abstract) which crushing strength is advantageous when used in a bed that has a substantial height or when a second layer of catalyst particles is placed upon the catalyst bed (see column 2, lines 14-19).

Art Unit: 1754

Regarding claim 2, Mulaskey '079 discloses a length of about 0.2 inches (see column 11, line 43).

Regarding claim 3, Mulaskey '079 discloses a length to diameter ratio of 1-3 (see column 14, lines 63-64).

Regarding claim 4, Neel '268 discloses a pore volume of at least 0.5 ml/g (see column 2, lines 3-6).

Regarding claim 5, Mulaskey '079 discloses surface area above 300 m²/g.

Regarding claim 6, Mulaskey '079 discloses less than 6% attrition resistance (see column 5, lines 46-49).

Regarding claim 7, Mulaskey '079 discloses catalysts (see abstract).

Regarding claim 8, Mulaskey '079 metal oxide catalyzers (see paragraph bridging columns 5-6).

Regarding claim 9, Mulaskey '079 discloses hydrocarbon conversion processes (see abstract).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kumberger et al. US 6,521,197 discloses catalysts made up of Al₂O₃ (abstract) having a star shape (see column 4, lines 3-4); Rowse et al. US 5,372,620 discloses alumina filament extrudates having various shapes and pore volumes (see abstract and Examples); Clough et

Art Unit: 1754


al. US 5,633,081 discloses coated porous alumina extrudates for use as catalyst supports having various pore sizes, volumes, and surface areas (see abstract and Examples); and Wunder et al. US 4,370,261 discloses star-shaped alumina extrudates (see Figures).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EMJ
March 19, 2003


Stanley S. Silverman
Supervisory Patent Examiner
Technology Center 1700